

Amendments to the Claims:

This listing of claims will replace all prior versions; and listings, of claims in the application:

Listing of Claims:

1.-5. (cancelled)

6. (withdrawn) The apparatus of claim 1 further comprising a fluid-filled balloon coupled to the housing to adjust a location of the focal point of the high intensity focused ultrasound system.

7. (withdrawn) The apparatus of claim 1 wherein the patient's septum primum and septum secundum are apposed during treatment.

8. (withdrawn) The apparatus of claim 7, wherein apposition of the patient's septum primum and septum secundum is achieved noninvasively using drugs, noninvasive procedures, or a combination thereof.

9. (withdrawn) The apparatus of claim 7, wherein increased contact pressure between the patient's septum primum and septum secundum is achieved noninvasively using drugs, noninvasive procedures, or a combination thereof.

10. (withdrawn) A method of non-invasively treating patent foramen ovale comprising:

providing a housing having an ultrasound imaging system and a high intensity focused ultrasound system disposed in alignment with the ultrasound imaging system;

contacting the housing against a patient's body;

operating the ultrasound imaging system to generate an image of a portion of cardiac tissue; and operating the high intensity focused ultrasound system, guided by the image, to heat or ablate either or both of a patient's septum primum or septum secundum.

11. (withdrawn) The method of claim 10 further comprising generating and displaying a marker corresponding to a focal point of the high intensity focused ultrasound system on the image.

12. (withdrawn) The method of claim 10 further comprising modifying a location of the target site by adjusting a location of the focal point of the high intensity focused ultrasound system.

13. (withdrawn) The method of claim 10 further comprising disposing a fluid-filled balloon between the patient's body and the housing to adjust a location of the focal point of the high intensity focused ultrasound system.

14. (withdrawn) The method of claim 10 further comprising apposing the patient's septum primum and septum secundum noninvasively using drugs, noninvasive procedures, or a combination thereof.

15. (withdrawn) The method of claim 10 further comprising increasing contact pressure between the patient's septum primum and septum secundum is noninvasively using drugs, noninvasive procedures, or a combination thereof.

16.-24. (cancelled)

25. (original) A method of treating patent foramen ovale comprising:
providing a catheter having a distal portion housing an ultrasound imaging system and a high intensity focused ultrasound system disposed in alignment with the ultrasound imaging system;

disposing the distal portion of the catheter within a patient's body lumen;
operating the ultrasound imaging system to generate an image of a portion of cardiac tissue; and

operating the high intensity focused ultrasound system, guided by the image, to heat or ablate either or both of the patient's septum primum or septum secundum.

26. (cancelled)
27. (original) The method of claim 25, wherein the body lumen is the aorta.
28. (original) The method of claim 25, wherein the body lumen is the right atrium.
29. (original) The method of claim 25, wherein the body lumen is the inferior vena cava.
30. (original) The method of claim 25, wherein the body lumen is the superior vena cava.
31. (original) The method of claim 25 further comprising generating and displaying a marker corresponding to a focal point of the high intensity focused ultrasound system on the image.
32. (original) The method of claim 25 further comprising modifying a location of the target site by adjusting a location of the focal point of the high intensity focused ultrasound system.
33. (original) The method of claim 25 further comprising apposing the patient's septum primum and septum secundum noninvasively using drugs, noninvasive procedures, or a combination thereof.
34. (currently amended) The method of claim 25 further comprising increasing contact pressure between the patient's septum primum and septum secundum noninvasively using drugs, noninvasive procedures, or a combination thereof.
35. (withdrawn) Apparatus as in claim 1, wherein the housing is adapted to apply energy to either or both of the septum primum or septum secundum from outside a patient's body.

36. (cancelled)

37. (withdrawn) The method of claim 10, wherein contacting comprises engaging the housing on an outside surface of the patient's body.

38. (withdrawn) The method of claim 10, wherein contacting comprises engaging the housing on an esophageal surface of the patient's body.

39. (withdrawn) The method of claim 10, wherein contacting the housing comprises introducing the housing in a patient's heart chamber.

40. (previously presented) The method of claim 32 wherein the location of the focal point of the high intensity focused ultrasound system is adjusted within a two-dimensional plane orthogonal to an axis of the high intensity focused ultrasound system.

41. (previously presented) The method of claim 32 wherein the location of the focal point of the high intensity focused ultrasound system is adjusted by modifying a location of a depth of the focal point of the high intensity focused ultrasound system.